

AMENDMENTS TO THE CLAIMS

Please amend the claims without prejudice or disclaimer to read as follows:

Claims 1 – 38 (Cancelled).

Claim 39 (previously presented). A transparent capacitive touch sensing system comprising:

a substrate;

a sensory array disposed on the substrate and comprising a plurality of substantially transparent conductive traces disposed along a first axis, the sensory array covering a portion of the substrate, wherein the sensory array is configured to sense capacitively the input object along a second axis;

a substantially transparent and electrically conductive ground plane configured to shield electrically a bottom of said sensory array opposite the input object; and

a sensing device for detecting capacitance changes on said sensory array.

Claim 40 (previously presented). The system of claim 39, further including a position detector for determining a position of said input object near said sensory array.

Claim 41 (previously presented). The system of claim 39, further including a system that recognizes tap gestures.

Claim 42 (previously presented). The system of claim 39, wherein said substrate is a flexible, transparent substrate.

Claim 43 (previously presented). The system of claim 39, wherein said substrate is a rigid, transparent substrate.

Claim 44 (cancelled).

Claim 45 (previously presented). The system of claim 39, wherein said sensory array is atop a display device.

Claims 46-54 (cancelled).

Claim 55 (previously presented). A transparent capacitive touch sensing system comprising:

a substantially transparent two-dimensional sensory array consisting of a plurality of substantially transparent conductive traces in an X axis and a plurality of substantially transparent conductive traces in a Y axis for sensing capacitive coupling between an input object and said sensory array along two axes, wherein a bottom of said sensory array opposite the input object is electrically shielded using a substantially transparent and electrically conductive ground plane;

a substantially transparent electrically insulating material separating said plurality of X traces from said plurality of Y traces; and

a sensing device for detecting capacitance changes on said sensory array.

Claims 56-59 (cancelled).

Claim 60 (previously presented). A transparent capacitive touch sensing system comprising:

a substantially transparent two-dimensional sensory array consisting of a plurality of substantially transparent conductive traces in an X axis and a plurality of substantially transparent conductive traces in a Y axis for sensing capacitive coupling between an input object and said sensory array along two axes, wherein said conductive traces in the X axis and the Y axis are spaced such that conductive traces in the X axis substantially fill spaces between conductive traces in the Y axis to thereby form a substantially space-filling pattern across said sensory array;

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a substantially transparent electrically insulating material separating said plurality of X traces from said plurality of Y traces; and

a sensing device for detecting capacitance changes on said sensory array.

Claim 61 (previously presented). The system of claim 60, wherein said sensory array comprises a plurality of layers having approximately the same index of refraction.

Claim 62 (previously presented). The system of claim 60, wherein said sensory array is atop a display device.

Claim 63 (previously presented). The system of claim 60, wherein said sensory array is beneath a clear protective covering for a display device.

Claims 64 – 78 (cancelled).

Claim 79 (currently amended). A substantially transparent capacitive sensor comprising:

an active area configured to accept input from a conductive object, said active area including a plurality of substantially transparent conductive traces disposed in an X axis and a plurality of substantially transparent conductive traces disposed in a Y axis; and

a substantially transparent adhesive interposed between said conductive traces;

wherein said capacitive sensor has substantially uniform transmissivity within said active area.

Claim 80 (previously presented). The substantially transparent capacitive sensor of Claim 79, wherein said plurality of substantially transparent conductive traces disposed in said X axis and said plurality of substantially transparent conductive traces disposed in said Y axis together substantially occupy said active area.

Claim 81 (previously presented). The substantially transparent capacitive sensor of Claim 79, wherein said plurality of substantially transparent conductive traces disposed in said X axis and said plurality of substantially transparent conductive traces disposed in said Y axis are aligned to maximize transparency.

Claim 82 (cancelled).

Claim 83 (currently amended). The substantially transparent capacitive sensor of ~~claim 82~~ claim 79 wherein the substantially transparent adhesive has an index of refraction similar to an index of refraction of said conductive traces.

Claim 84 (original). The substantially transparent capacitive sensor of claim 79 wherein said conductive traces in the X axis and in the Y axis are spaced such that conductive traces in the X axis substantially fill spaces between conductive traces in the Y axis and vice versa to thereby form a substantially space-filling pattern across said sensory array.

Claim 85 (currently amended). The substantially transparent capacitive sensor of claim 79 ~~claim 84 further comprising a wherein the~~ substantially transparent adhesive ~~interposed between said conductive traces and having~~ has an index of refraction similar to an index of refraction of the conductive traces.

Claim 86 (original). The system of claim 60 further comprising a substantially transparent adhesive disposed to fill gaps between the substantially transparent conductive traces.

Claim 87 (original). A transparent capacitive touch sensor formed on a substrate for accepting an input from a conductive object, the system comprising:

a sensory array of substantially transparent conductive traces formed from a material having an index of refraction, the array comprising a first plurality of conductive traces disposed on said substrate in an first direction and a second plurality of conductive traces disposed on said substrate in a second direction different from said first direction, wherein the first and second pluralities of conductive traces are formed such that conductive traces in the first direction substantially fill spaces between conductive traces in the second direction and vice versa to thereby form a substantially space-filling pattern across said sensory array;

a substantially transparent adhesive interposed between said conductive traces and having an index of refraction similar to the index of refraction of the conductive traces to thereby provide a substantially uniform transmissivity across said sensory array; and

a sensing device electrically coupled to each of the conductive traces to thereby detect capacitance changes on said sensory array.

Claim 88 (new). A substantially transparent capacitive sensor comprising:

an active area configured to accept input from a conductive object, said active area including a plurality of substantially transparent conductive traces disposed in an X axis and a plurality of substantially transparent conductive traces disposed in a Y axis, wherein said conductive traces in the X axis and in the Y axis are spaced such that conductive traces in the X axis substantially fill spaces between conductive traces in the Y axis and vice versa to thereby form a substantially space-filling pattern across said sensory array; and

wherein said capacitive sensor has substantially uniform transmissivity within said active area.

Claim 89 (new). The system of claim 39, wherein said sensory array is atop a fingerprint sensor.

Claim 90 (new). The system of claim 39, wherein said sensory array is atop a passive graphic underlay.

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Claim 91 (new). The system of claim 45, wherein said display device is a liquid crystal display.

Claim 92 (new). The system of claim 60, wherein said sensory array is atop a fingerprint sensor.

Claim 93 (new). The system of claim 60, wherein said sensory array is atop a passive graphic underlay.

Claim 94 (new). The system of claim 62, wherein said sensory array is directly disposed on the display device.

Claim 95 (new). The system of claim 62, wherein said display device is a liquid crystal display.

Claim 96 (new). The capacitive sensor of claim 79, wherein the active area is atop a display device.

Claim 97 (new). The system of claim 96, wherein said active area is directly disposed on the display device.

Claim 98 (new). The system of claim 96, wherein said display device is a liquid crystal display.